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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,264	01/21/2004	Kia Silverbrook	RRA11US	1034
24011	7590	12/08/2009	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			FIDLER, SHELBY LEE	
			ART UNIT	PAPER NUMBER
			2861	
			NOTIFICATION DATE	DELIVERY MODE
			12/08/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

<b>Application No.</b> 10/760,264	<b>Applicant(s)</b> SILVERBROOK, KIA	
<b>Examiner</b> SHELBY FIDLER	<b>Art Unit</b> 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 09 September 2009.
- 2a)  This action is **FINAL**.                      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-3 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-3 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \*    c)  None of:
- Certified copies of the priority documents have been received.
  - Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Responsive Office Action***

This Office Action is responsive to Applicant's remarks and amendments filed 9/9/2009.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, both the first and second authentication devices (of claim 1) must be shown or the feature(s) canceled from the claim(s). Please note that only one QA chip (57) is identified in the drawings. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

#### **Regarding claim 1:**

This claim states that the printer cartridge comprises a first authentication device for authenticating one or more properties of the printhead with the inkjet printer, and a second authentication device for authenticating one or more properties of the printing fluid storage with the inkjet printer. While the instant specification appears to provide support for having both of these authentication devices, it does not appear to provide support for having both authentication devices "connected to a common authenticated data bus of the inkjet printer via the first electrical connector." Paragraphs 139-142 of

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the instant specification appear to provide support for the printer cartridge (6) having both the first and second authentication devices (ink QA chip and printhead QA chip). Paragraph 69 of the specification also provides support for the electrical interface used between a QA chip (57) and the printer. However, the instant disclosure seems silent as to how a second QA chip would be interfaced with the printer.

**Regarding claims 2-3:**

These claims fail to comply with the written description requirement at least for their dependency on claim 1.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Regarding claim 1:**

This claim states that the printer cartridge comprises: “a first authentication device for authenticating one or more properties of the printhead with the inkjet printer” and “a second authentication device for authenticating one or more properties of the printing fluid storage with the inkjet printer.”

In light of the “device for” language, it appears that Applicant desires the scope of the claim to cover any and all devices that may be used to perform the recited functions of authenticating. Therefore, this language effectively acts in the manner described by

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the sixth paragraph of 35 U.S.C. 112. However, these limitations lack the “means for” language required by the sixth paragraph. Therefore, Examiner is unsure whether these claims should be interpreted to include the corresponding structures disclosed in Applicant’s specification and their equivalents.

If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to:

(a) Amend the claim to include the phrase “means for” or “step for” in accordance with these guidelines: the phrase “means for” or “step for” must be modified by functional language and the phrase must **not** be modified by sufficient structure, material, or acts for performing the claimed function; or

(b) Show that the claim limitation is written as a function to be performed and the claim does **not** recite sufficient structure, material, or acts for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph. For more information, see MPEP § 2181.

**Regarding claims 2-3:**

These claims are indefinite for at least their dependency on claim 1.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over McElfresh et al. (US 6557976 B2) in view of Arthur et al. (US 5049898).

**Regarding claim 1:**

**McElfresh et al. disclose** a printer cartridge (printhead assembly 12 + ink supply assembly 14 housed together as a pen - col. 3, lines 45-47) for removable insertion in an inkjet printer, the printer cartridge comprising:

a printing fluid storage (reservoir 15);

a pagewidth printhead (printhead assembly 12) in fluid communication with the printing fluid storage (col. 3, lines 44-45), the pagewidth printhead having an elongate array of nozzles (nozzles 13) extending transverse to a media feed direction (Fig. 2);  
and

a first electrical connector (electrical interconnect 69) in electrical communication with the printhead (col. 6, lines 8-19) and disposed adjacent a first end (right end shown in Fig. 5) of the elongate array of nozzles (Fig. 5).

**McElfresh et al. do not expressly disclose** that the printer cartridge comprises first and second authentication devices.

**However, Arthur et al. discloses** a printer cartridge (12) comprising:

a first authentication device (element of memory 14 storing orifice plate alignment data) for authenticating one or more properties of the printhead with the inkjet printer (col. 4, lines 18-20); and

a second authentication device (element of memory 14 storing the droplet count) for authenticating one or more properties of the printing fluid storage with the inkjet printer (col. 3, lines 32-37), wherein

the first and second authentication devices are connected to the inkjet printer via an electrical connector (Fig. 3).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to utilize the authentication devices disclosed by Arthur et al. into McElfresh et al.'s printer cartridge. Motivation for doing so, as provided by Arthur et al., is to enable indication of ink information to the user, and to compensate for any printhead misalignment errors (col. 2, lines 14-32).

Examiner notes the additional limitation that the first and second authentication devices are connected to a common authenticated data bus of the inkjet printer. However, this limitation only serves to define the structure of the inkjet printer and does not appear to limit the structure of the printer cartridge itself. Therefore, this limitation has not been granted patentable weight.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over McElfresh et al. as modified by Arthur et al., as applied to claim 1 above, and further in view of Inpyn (US 6053598).

**Regarding claim 2:**



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**McElfresh et al.'s modified printer cartridge comprises** all the limitations of claim 1, **but neither McElfresh et al. nor Arthur et al. expressly disclose** that the printer cartridge comprises a second electrical connector.

**However, Inpyn discloses** a printer cartridge (10) that provides electrical connectors (contact pads 50) on each of both ends of an elongate array of nozzles (Fig. 18) such that the electrical connectors engage with corresponding connectors of an inkjet printer with a contact force that is parallel to the longitudinal extent of the elongate array of nozzles such that a longitudinal compressive force acts on the printer cartridge when it is installed in the printer (Fig. 18). Inpyn teach that this electrical connection configuration occupies a minimal amount of space of the surface of the print head housing (col. 15, lines 48-52).

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to utilize the placement of electrical connectors disclosed by Inpyn into McElfresh et al.'s modified printer cartridge.

**Regarding claim 3:**

**McElfresh et al.'s modified printer cartridge comprises** all the limitations of claim 2, and **McElfresh et al. also disclose** that the printing fluid storage (15), the pagewidth printhead (12), and the first and second electrical connectors (69, 69') are attached to a body of the printer cartridge (Figs. 2, 5).

### ***Response to Arguments***

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Please see the above rejection, which shows that, given the disclosures provided by McElfresh et al. and Arthur et al., it would have been obvious to provide a printer cartridge comprising a first authentication device and a second authentication device.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Communication with the USPTO***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHELBY FIDLER whose telephone number is (571)272-8455. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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